## 4.11 UTILITIES

This section includes discussions of impacts and mitigation measures related to utilities in the study area. This section will focus primarily on the (Enhanced) Reduced Build Alternative. The (Enhanced) Reduced Build Alternative is the identified Preferred Alternative.

The additional analyses in this section were the result of refined engineering, responding to comments received during the public comment period of the August 2001 DEIR/EIS, and/or additional planning efforts. Some of the modifications in this section include more narrowly defined impacts to utility services, as compared to the August 2001 DEIR/EIS, Utility Section 4.11. The comments and responses to comments are attached as Appendix A of this FEIS/EIR (Volumes II & III).

### 4.11.1 Alternatives

A. PREFERRED ALTERNATIVE/(ENHANCED) REDUCED BUILD ALTERNATIVE

The (Enhanced) Reduced Build Alternative would not require new or expanded utility services. In the August 2001 DEIR/EIS, an inclusive list of all potential utility relocations was provided (August 2001 DEIR/EIS, Table 4.11-2). Due to additional planning efforts and refined engineering, these potential relocations have been reduced to the three locations identified below. The final selection of utility relocations will be determined at the final design stage. The (Enhanced) Reduced Build Alternative is located within a developed area with adequate existing utility services. Two Southern California Edison (SCE) substations and one ductbank have been identified for partial acquisition. The two power substations and one ductbank are located in the City of Orange at the following locations:

1) Two overhead SCE 138 kV High Voltage Transmission circuits are on separate lattice towers which cross the SR-22 Freeway west of Hoover Street. The existing transmission cables associated with both systems are directly above the location of the proposed westerly bridge abutments for the SR-22 widening, therefore, vertical clearances below the high voltage conductors are extremely limited and must be carefully considered by the Design Contractor;
2) An overhead SCE 66 kV High Voltage Transmission system on steel poles crosses above the SR-22 Freeway along the east side of Yockey Street. The existing steel poles are located just outside the SR-22 right-of-way, where the bridge is proposed to be widened in the eastbound and westbound lanes;
3) SCE operates an underground high voltage ductbank north of the SR-22 and west of The City Drive, within Metropolitan Dr., which will be re-aligned to accommodate the new southbound SR-57 to westbound SR-22 on-ramp.

Since the two substations and one ductbank are greater than 50,000 kV, they will be subject to the Public Utilities Commission (PUC) General Order No. 131-D. This Rule and subsequent sections are applied to the planning and construction of electric generation, transmission/power/distribution line facilities, and substations located in California.

Compliance with Sections X (EMF) and XI (Notice) of General Order No. 131-D will be needed as part of the Permit to Construct request. Compliance with Section IX (Transmission Line Facilities of 200 kV and Over) is specifically exempted under Section III B(f). Under Section X (Potential Exposure to Electric and Magnetic Fields (EMF)), the following must be adhered to at the Design Stage:

Section X-A. Application for CPCN or Permit to Construct

Applications for a CPCN (Permit to Construct) shall describe the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields generated by the proposed facilities, in compliance with Commission order. This information may be included in the Proponent's Environment Assessment (PEA) required by Rules of Practice and Procedure 17.1.

Section X-B. EMF Technical Assistance

The EMF education program administered by the California Department of Health Services for regulated electric utility facilities, established in Investigation (I.) 9 l-01-012, is available to provide independent information about EMF to local government, other state agencies, and the public to assist in their consideration of the potential impacts of facilities proposed by electric utilities. Local government and the public should first contact their public health department.

Section XI-B Power Line Facilities between 50kV and 200kV and Substations Designed to Operate Over 50kV

The utility shall give notice of the construction of any power line facilities or substations between 50 kV and 200 kV deemed exempt pursuant to Section III herein, not less than 30 days before the date when construction is intended to begin by:

1. Direct mail to the planning director for each county or city in which the proposed facility would be located and the Executive Director of the Energy Commission; and
2. Advertisement, not less than once a week, two weeks successively, in a newspaper or newspapers of general circulation in the county or counties in which the proposed facility would be located, the first publication to be not later than 45 days before the date when construction is intended to begin; and
3. By posting a notice on-site and off-site where the project would be located; and
4. Filing an informational advice letter with the CACD in accordance with General Order 96-A, which includes a copy and distribution list of the notices required by items 1-3 herein. On the same day, a copy of the advice letter must be delivered to the CPUC Public Advisor.

The existing SCE Lampson substation is located on the north side of SR-22 west of Lewis Street. The substation is fed from 66kv overhead conductors on wood poles located along the east side of Lewis Street south of and crossing SR-22 to the SCE substation, whose southerly property line is adjoined with the existing SR-22 right-of-way line. There are four steel poles along the north side of SR-22 supplying the 66-kV feed to the substation that will be impacted by the SR-22 widening. The length of the 66-kV relocation could exceed 400 meters.

## B. OTHER ALTERNATIVES

### 1. NO BUILD ALTERNATIVE

The No Build Alternative assumes that no improvements would be made to the existing area beyond those already planned and approved. Therefore, negligible impacts to utility use or availability would occur.

### 2. TSM/EXPANDED BUS SERVICE ALTERNATIVE

The TSM/Expanded Bus Service Alternative would include only minor construction. There would be negligible impacts to utilities.

### 3. FULL BUILD ALTERNATIVE

The Full Build Alternative would not require new or expanded utility services.

***Thresholds of Significance for CEQA:***

- Disruption of utility service or damage to utilities

***CEQA Findings:***

A. PREFERRED ALTERNATIVE/(ENHANCED) REDUCED BUILD ALTERNATIVE

The (Enhanced) Reduced Build Alternative would not require new or expanded utility services. The alternative is located within a developed area with adequate existing utility services.

Improvements proposed by the (Enhanced) Reduced Build Alternative would result in utility relocations where utilities conflict with widening of the freeways, improvements of interchanges, and construction activities. Utilities could be temporarily or permanently relocated. Relocations could result in short-term service interruptions, although with standard construction practices, such interruptions would be minimal. Relocations and construction easements would be identified during final design, and the appropriate utility companies would be contacted prior to construction activities. These minimal impacts would be less than significant.

B. OTHER ALTERNATIVES

1. NO BUILD ALTERNATIVE

   The No Build Alternative would have no impacts to utility use or availability.

2. TSM/EXPANDED BUS SERVICE ALTERNATIVE

   The TSM/Expanded Bus Service Alternative would include only minor construction. There would be no impacts to utilities.

3. FULL BUILD ALTERNATIVE

The Full Build Alternative would not require new or expanded utility services. The alternative is located within a developed area with adequate existing utility services. The only exception is in the proposed arterial in the former Pacific Electric right-of-way. For this new street, electricity, irrigation water, and stormwater drainage would need to be provided. There is adequate capacity in adjacent areas to serve these needs.

Improvements proposed by the Full Build Alternative would result in utility relocations where utilities conflict with widening of the freeways, improvements of interchanges, development of the arterial, and construction activities. As previously discussed, relocations of utilities could result in short-term service interruptions, although with standard construction practices, such interruptions would be minimal. These minimal impacts would be less than significant. Refer to Section 4.11.3 for discussions on the potential protection-in-place locations with the Full Build Alternative.

### 4.11.2 Mitigation

A. PREFERRED ALTERNATIVE/(ENHANCED) REDUCED BUILD ALTERNATIVE

UTI-(E)RB-1. The project will comply with the standard construction practices and procedures as required by the Department for relocation and protection of existing utilities, including the Department's Policy on High- and Low-Risk Underground Facilities within Highway Rights-of-way.

UTI-(E)RB-2. The project will comply with the provisions of PUC General Order No. 131-D, pertaining to the planning and construction of electric generation, transmission/power/distribution line facilities and substations located in California. During the release of the DEIR/EIS for public

review/comments, the California Public Utilities Commission was notified, and received a copy of the DEIR/EIS document.

UTI-(E)RB-3. Prior to start of construction, a set of signed, final plans will be made available to affected utility surveyors in order to identify underground facilities and provide design alterations.

UTI-(E)RB-4. Designers will provide "signed" final plans and subsequent revisions to the Southern California Gas Company. A minimum of 12 weeks is required to analyze the plans and design alterations due to conflicting facilities. Upon request, at least two days prior to the start of construction, the Southern California Gas Company will mark underground facilities at no cost.

B. OTHER ALTERNATIVES

1. NO BUILD ALTERNATIVE

None required.

2. TSM/EXPANDED BUS SERVICE ALTERNATIVE

None required.

3. FULL BUILD ALTERNATIVE

The Full Build Alternative would not require new or expanded utility services. The alternative is located within a developed area with adequate existing utility services. The only exception is in the proposed arterial in the former Pacific Electric right-of-way. For this new street, electricity, irrigation water, and storm water drainage would need to be provided. There is adequate capacity in adjacent areas to address these needs.

The mitigation measures listed above for the Preferred Alternative/(Enhanced) Reduced Build Alternative also apply to the Full Build Alternative.

4.11.3 RESIDUAL IMPACTS AFTER MITIGATION

A. PREFEERED ALTERNATIVE/(ENHANCED) REDUCED BUILD ALTERNATIVE

Less than substantial.

B. OTHER ALTERNATIVES

1. NO BUILD ALTERNATIVE

None.

2. TSM/EXPANDED BUS SERVICE ALTERNATIVE

None.

3. FULL BUILD ALTERNATIVE

Less than substantial.